REMARKS

Upon entry of the claim amendments, Claims 1-2, 4-15, 17, and 19-20 will be all the claims pending in the application.

Claims 6-8, 11 and 13 have been withdrawn from examination.

Regarding the withdrawal of Claim 11 due to the restriction requirement, Applicants respectfully remind the Examiner that where an applicant elects claims directed to a product, and a product claim is subsequently found allowable, a withdrawn claim which depends from or otherwise includes all the limitations of the allowable product claim will be rejoined. MPEP §821.04. In the present case, withdrawn Claim 11 depends from Claim 1.

Independent Claims 1 and 20 have been amended such that monofunctional monomer (A-1) is an oxetane monomer, and polyfunctional monomer (A-2) is an epoxidized product of a block copolymer produced by anionic polymerization of an ethylene compound and a diene compound. The solid resin (B) recited in Claims 1 and 20 has been amended as supported by page 16, lines 14-21, and the paragraph bridging pages 16 and 17 of the specification.

No new matter has been added.

Applicants note with appreciation the Examiner's indication at page 2 of the final Action of the withdrawal of the §112, first paragraph, rejection of Claims 1-5, 9-10, 12, and 14-21 and the §102(a) rejection of Claims 1-5, 9-10, 12, and 14-21 based on the Polymer Preprints article.

At the top of page 3 of the final Action, the following prior art rejections have been maintained from the first Action:

> Claims 1, 5, 9, 14-15, 17, and 19-20 are rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by PCT Publication No. WO 00/63272 ("WO '272"); and
>
> Claim 12 is rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over WO '272.

WO '272 does not disclose or suggest the claimed cationically polymerizable mixture (A) comprising a monofunctional monomer (A-1) that is an oxetane monomer and a polyfunctional monomer (A-2) that is an epoxidized product of a block copolymer produced by anionic polymerization of an ethylene compound and a diene compound.

Furthermore, WO '272 does not disclose or suggest claimed solid resin (B). Amended Claims 1 and 20 recite that the solid resin (B) is a tackifier. According to the present invention, the solid resin (B) is compatible with the monomer mixture (A-1 + A-2 + A-3) at room temperature. The solid resin (B) is a tackifier and adjusts the viscoelastic characteristics (at 1 Hz and 100 Hz) of the photopolymerized polymer. Applicants refer, for example, to the second full paragraph at page 16 of the specification.

The elastomer particles of WO '272 (component D) do not dissolve in monomer mixture and are entirely different from the claimed solid resin (B).

WO '272 discloses a photo-curable resin composition for photo-fabrication of three-dimensional objects. The composition does not comprise a tackifier (see WO '272's Claim 1, its abstract, etc.).

The composition of WO '272 is heterogeneous because component D is elastomer particles with an average particle diameter of 10-700 nm, which does not dissolve in monomer mixture and keeps the shape of particles. The heterogeneous composition of WO '272 results in a hard photo-polymerized polymer of impact resistance. Pages 25-27 of WO '272.

With respect to the disclosure of "a homogeneous liquid mixture" at page 38, line 26, through page 39, line 3, it means simply "a uniform liquid mixture from macroscopic viewpoints."

In addition, the three-dimensional objects of WO '272 exhibit sufficient mechanical strength under use conditions. Page 3, lines 1-18, and especially lines 12-18). The compositions of WO '272 do not necessarily possess the claimed viscoelastic properties, as is required for an anticipation by inherency rejection.

In short, WO '272 does not disclose (anticipate) or suggest (render obvious) the homogeneous cationically polymerizable liquid composition for adhesion of the present invention.

At pages 3-5 of the final Action, the following prior art rejection have been maintained from the first Action:

> Claims 1-5, 9-10, 12, 14-15, 17, and 19-20 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over European Patent Publication No. 0 848 294 ("EP '294"); and
>
> Claims 1-5, 9-10, 12, 14-15, 17, and 19-20 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Japan Patent Publication Nos. 11-140279, 11-152441, 10-158581, 5-171083, 5-171084, 7-62082, and 7-53711 in view of Japan Patent Publication Nos. 9-40760 and 9-328651.

Applicants respectfully traverse.

Applicants refer to the Examiner's "commensurate in scope" argument at page 4 of the final Action, which is also incorporated into the Examiner's remarks at page 5 of the final Action. Applicants have amended independent Claims 1 and 20. Amended Claims 1 and 20 are commensurate in scope with the objective evidence of patentability presented in the specification.

There can be no closer comparison than the comparison between Example 1 and Comparative Example 1, as set forth at pages 24-31, and especially Tables 1-3. As can be seen from Table 1, the composition of Comparative Example 1 is practically the same as the composition of Example 1, except that the composition of Comparative Example 1 does not include Regalite 1090, a hydrogenated petroleum resin having a softening point of about 90°C. Thus, the composition of Comparative Example 1 is representative of the exemplified compositions in EP '294, and the composition of Comparative Example 1 is actually closest to the claimed composition (as represented by the composition of Example 1) than any of the

example compositions in EP '294. All of the other components of the composition of Comparative Example 1 are the same as the components of the composition of Example 1 and are present in the same amounts (OXR-12, EKP-207, Rhodorsil 2074). The only difference is that Comparative Example 1 does not comprise any tackifier and shows poor tack strength.

Therefore, the unexpected results demonstrated at Tables 2-3 and pages 30-31 of the specification rebut the alleged *prima facie* cases of obviousness.

In addition, the primary Japanese patent publications, including 11-140279 and 7-53711, do not disclose or suggest the claimed cationically polymerizable mixture (A) comprising a monofunctional monomer (A-1) that is an oxetane monomer and a polyfunctional monomer (A-2) that is an epoxidized product of a block copolymer produced by anionic polymerization of an ethylene compound and a diene compound. The primary Japanese patent publications, including 11-140279 and 7-53711, do not disclose or suggest the combination of (A-1), (A-2) and (A-3).

Furthermore, amended Claims 1 and 20 recite that the solid resin (B) is a tackifier and that it is selected from the group consisting of a rosin resin, a modified rosin resin, a hydrogenated rosin resin, a terpene resin, a terpene phenol resin, an aromatic modified terpene resin, a C_5 or C_9 petroleum resin or a hydrogenated derivative thereof, and a chroman resin.

Still further, the polymer of this invention is obtained by cationic polymerization and satisfies four viscoelastic characteristic relationships. It shows no so-called "glue residue," has good initial adhesion, good pressure-sensitive characteristics and a high tack value. Applicants refer, for example, to page 30 and Tables 2 and 3 in the present specification.

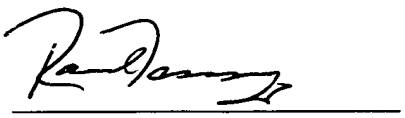
The formulations of the primary JP publications do not necessarily possess the claimed viscoelastic behaviors, as is required for inherency.

Reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, he is kindly requested to contact the undersigned at the telephone number listed below.

best resolved through a personal or telephone interview, he is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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Date: May 10, 2004